

AMENDMENT AND PRESENTATION OF CLAIMS

Please replace all prior claims in the present application with the following claims.

1. (Currently Amended) A laminate comprising a transparent type I collagen sheet and a cultured layer of human corneal endothelial cells provided on said sheet, wherein said sheet has a thickness ranging from 5 to 50 micrometers.
2. (Original) The laminate according to claim 1, wherein the transparency of said transparent type I collagen sheet is maintained under physiological conditions.
3. (Previously Presented) The laminate according to claim 1, wherein said transparent type I collagen sheet has an adhesive factor or bioadhesive layer on the opposite side from the cultured layer of human corneal endothelial cells.
4. (Previously Presented) The laminate according to claim 3, wherein an adhesive factor or bioadhesive layer is provided between said transparent type I collagen sheet and said cultured layer of human corneal endothelial cells.
5. (Previously Presented) The laminate according to claim 3, wherein said adhesive factor is human plasma fibronectin.
6. (Currently Amended) A method for manufacturing a laminate of cultured human corneal endothelial cells ~~layer~~ comprising:

preparing a transparent type I collagen sheet having a thickness ranging from 5 to 50 micrometers; and

culturing human corneal endothelial cells on said sheet to form a cultured layer of human corneal endothelial cells.

7. (Original) The method according to claim 6 wherein the transparency of said transparent type I collagen sheet is maintained under physiological conditions.

8. (Previously Presented) The method according to claim 6, wherein said human corneal endothelial cells are cultured on a transparent type I collagen sheet that has been coated with an adhesive factor or a bioadhesive.

9. (Original) The method according to claim 8, wherein said adhesive factor is human plasma fibronectin.

10. (Previously Presented) The method according to claim 6, wherein said human corneal endothelial cells are cultured after providing a culture solution containing human corneal endothelial cells on a transparent type I collagen sheet and applying centrifugal force in the direction of said transparent type I collagen sheet.

11. (Currently Amended) The method according to claim 6, wherein in the culturing of said human corneal endothelial cells, the concentration of said human corneal endothelial cells in [[a]] the culture solution is set to within a range of from 1×10^5 to 1×10^7 cells /mL.

12. (Previously Presented) The method according to claim 6, wherein said corneal endothelial cells are cells that have been passaged.

13. (Original) The method according to claim 12, wherein the passage is conducted for 2 to 10 generations.

14. (Previously Presented) The method according to claim 6, wherein said corneal endothelial cells are cultured under conditions of 37°C and 10 percent CO₂.

15. (Previously Presented) The method according to claim 6, wherein the culturing is conducted using a cell culturing solution comprising fetal bovine serum, growth factor, and hyaluronic acid in a medium of low glucose concentration.

16. (New) A method of transplanting a laminate comprising a transparent type I collagen sheet ranging from 5 to 50 micrometers in thickness and a cultured layer of human corneal endothelial cells provided on said sheet, the method comprising transplanting the laminate by inserting it into the anterior chamber.

17. (New) The method according to claim 16, comprising fixing the inserted laminate to the posterior corneal stroma.